

VIDEO SCRIPT INTRODUCTION TO ENHANCED WORK PLANNING COURSE ONE

The video is staged around an EWP process unfolding at a fictional facility. The process will be followed from start to finish. We start out with a positive, upbeat description of what EWP is. A matte box, which looks like a puzzle with 5 pieces, provides the frame for this video. Each puzzle piece is one of the 5 elements of EWP. The pieces start as still photos, and as each element is introduced, that puzzle piece grows into a live scene, illustrating the element in action.

The puzzle pieces are photos labeled with the 5 elements:

1. Line management ownership-Jon Yonko and other managers talking... dressed in suit and tie, office - type background, with PIs posted
2. Organizationally diverse teams- team of people, led by Jim Trujillo, around conference table. Team members are dressed to indicate their job positions, i.e., a suit (Management rep), coveralls (worker), medical gear, stethoscope (medical), jeans and flannel shirt, holding hard hat (construction), casual dress with clipboard and charts (planner), etc.
3. Graded approach-split screen to show minimum and maximum controls, i.e., a worker doing a routine valve change-out job by himself versus a Hazmat worker in full PPE? Can we try to work Mike Duffy into this photo...
4. Workforce involvement--Hanford craft worker dressed in coveralls, working with the core team, or at a glove box, instructing someone
5. Organized, institutionalized communication--formal meeting setting, with Linda Yost speaking up front, pointing to an overhead of "EWP communication resources: "world wide web page, teleconferencing, conferences, video conferencing...

Time: 26:39

Script Text

Video Scenes/Notes

Scene #1

Begin with 10 seconds of upbeat music. Present DOE and EWP logos. Make it clear that the acronym EWP means Enhanced Work Planning.

Move to shot of Joe Fitzgerald at his desk.

Scene #2

Joe Fitzgerald

Cleaning up former nuclear weapons sites safely and efficiently, is the key priority for the DOE. As our mission shifts to environmental cleanup, we face unparalleled opportunities and daunting challenges that will greatly affect the future of our Nation and indeed the world. I believe you share my personal commitment to resolving the concerns of millions of Americans who want prompt, safe, and efficient cleanup of their communities. Our first concern in this mission must be the health and safety of our workforce, and I am committed to making excellence in safety management a living reality at DOE. Enhanced Work Planning is going to help us get there.

CG to introduce Joe: "Joe Fitzgerald, Deputy Assistant Secretary for Worker Safety, DOE-HQ"

Scene #3

Narrator

Enhanced Work Planning, or EWP, is a process to improve work management throughout the Department of Energy complex. Generally, work packages were reviewed and re-reviewed, producing a system that often required more time to prepare and issue documents, than to actually perform the work. Inadequate considerations were given to health and safety hazards, and the work planning process itself decreased efficiency and productivity. EWP was introduced as means to improve work management. It enhances the processes of how to identify, plan, approve, control and execute work.

Voice over of narrator

Scene #4

Maintenance Craft

"You can't believe what I'm doing today. I've been a journeyman for 16 years and I got assigned a job to re-wire a light fixture..I get a work package that has 150 pages in it, that I guess I'm supposed to read before I do the work. I really wonder, how much of that applies to my job?"

Zoom to each worker as s/he talks. Show name and/or title of each person

Scene #5

Final, August 27, 1997

Script Text

Video Scenes/Notes

Construction Craft

Tell me about it. I was assigned a job to change out a 6" valve that required the use of a manlift. It took me three hours to find the keys to it.

Scene #6

Waste Management Technician:

You know, I don't even mind the administrative hang ups so much, it's the safety oversights I hate. Did you hear that Joe almost had a serious injury this morning on that glovebox job? He got into some live power on that junction box he thought was isolated. If someone would have talked to me beforehand, I could have told them of the secondary circuit from when I wired that job 10 years ago. Nobody asks us for input.

Scene #7

Narrator

Enhanced Work Planning is an innovative approach to work planning that demonstrates that safety and productivity go hand in hand. It focuses on the prevention of worker accidents through the early identification and control of hazards by bringing together safety, health, and medical considerations when planning work. And, it enhances productivity by involving the worker and reducing unnecessary work package reviews, controls, and monitoring.

Voice over of Narrator

Animate graphic "Doing the job Safer and Better"

Scene #8

The EWP initiative began in 1995 as a partnership among the Office of Environment, Safety and Health; the Office of Environmental Management; and the operating contractors.

The goal of EWP is to affect a lasting, fundamental upgrade in the Department's way of conducting work. EWP evaluates and improves the processes through which work is identified, planned, approved, controlled and carried out. It's designed to support and promote similar DOE initiatives like Integrated Safety Management; the primary tool for the Department and its contractors to systematically integrate safety into the management of work activities. EWP is the **execution** tool for the Integrated Safety Management at the task level.

Voice over of narrator

Scene #9

Lou Tanner, Core Team Leader

You know, we all think of our individual tasks and jobs in DOE as unique, and in a lot of ways they are. But however unique our work may be, it all has one unifying element. In order to ensure that any work is done safely, it must be planned. Proper precautions must be taken to ensure that the way a task is to be performed gets as much attention as deciding

CG to introduce Lou: "Lou Tanner, Maintenance Manager, Oak Ridge"

what task is to be done. The role of EWP, is to make sure that proper planning happens. EWP ensures that all affected disciplines are concurrently involved in the planning process, especially the workers doing the job. In this process, safety, health, medical, quality and Health Physics are not enemies; they become an integral part of the team, a team whose sole purpose is to see that work is done efficiently and, most importantly, safely. Come join us, let us explain the key elements involved in this process and how many of our sister sites in the DOE complex are successfully employing and embracing the EWP concept.

Scene #10

Narrator

EWP efforts are characterized by 5 key elements which embody the successful attributes of most outstanding management re-engineering and integrating efforts in both the public and private sectors:

1. Line Management Ownership of the work
2. Organizationally diverse work planning teams
3. A graded approach to work management, based on risk and complexity
4. Workforce involvement beginning at the earliest phase of work management, and
5. Organized, institutionalized communication between all those contributing to the work

Scene #11

Narrator

The goal of EWP is to effect a lasting, fundamental change that focuses on prevention of accidents and delays, through early identification and mitigation of hazards. And EWP is proving that SAFETY SAVES. In addition, we have also achieved significant gains in productivity through EWP processes.

Scene #12

Joe Fitzgerald

The Enhanced Work Planning initiative puts worker safety and productivity back in the forefront of our DOE mission. I ask you, as one who may be involved with a work planning team, or a core team, to bring your innovative ideas, your willingness to improve the status quo; your unique perspective and experience; your ability to think outside the box, and most importantly- your leadership ability- to join in this important initiative.

Voice over of Narrator

Use word graphics of the elements

5 Elements of EWP

1. Line management ownership
2. Organizationally diverse teams
3. Graded approach
4. Workforce involvement
5. Organized communication

Voice over of narrator

"SAFETY SAVES" graphic

Shot of Joe Fitzgerald at his desk.

Script Text

Video Scenes/Notes

Scene #13

Narrator

The Department of Energy initiated EWP to address problems found in many work planning programs. For example:

1. Redundant or inefficient processes for approval, scheduling, or work control,
2. Underutilization of worker knowledge and experience
3. Large backlogs of work requests
4. Employee lack of faith in safety and health analysis

The following is what some of your DOE counterparts have accomplished using EWP at various sites throughout the DOE complex:

1. A 25% reduction in total labor hours for preventive maintenance job planning while simultaneously increasing the amount of work reviewed by safety and health personnel to 100%.
2. A 11:1 payback on investment in EWP, resulting in a cost avoidance of \$7.6 million.
3. A 66% improvement in the time required to complete work activities associated with packaging, managing, and shipping waste.
4. A 21% reduction in personnel accidents and reportable events with a corresponding 36% increase in worker productivity.
5. And by optimizing the use of skill of the craft, 300 minor maintenance jobs out of a backlog of 690 jobs were processed without going through a formal lengthy process.

Voice over of Narrator

Word graphic: common reasons for implementing EWP

1. Redundant or inefficient processes
2. Underutilization of worker expertise
3. Large backlog of work requests
4. Lack of faith in safety and health analysis

Voice over of narrator

Word graphics of these results:

- 25% reduction in total labor hours
- 100% increase work review by S&H personnel
- Cost avoidance of \$7.6 million
- 66% improvement in time to complete activities
- 21% reduction in personnel accidents
- 36% increase in worker productivity
- 300 maintenance jobs processed without a formal lengthy process

Scene #14

Narrator

The current approach to work planning is a sequential process where the work package is prepared and reviewed by subject matter experts in sequence; nobody talks to anyone about duplications or conflicting comments. When any of the specialists make changes, all the parties must review the package again. Even simple jobs go through this cycle; and work packages for every day, routine tasks and work procedures become inches thick.

Using the Enhanced Work Planning approach, everyone collaborates from the beginning; safety, medical, crafts, engineering, planning. Tasks are examined for their risks and

Narrator voice over - animate graphic of "Current approach to planning"

Script Text

Video Scenes/Notes

complexities. The skills, abilities, and training of the workforce are documented and then used to plan accordingly. Redundancies and inefficiencies are avoided and any potential conflicts are resolved up front.

Scene #15

Narrator

There are five key elements to Enhanced Work Planning. The first is Line Management Ownership.

EWP is not imposed on line management. They sponsor it. For EWP to be successful, managers must have a positive attitude about safety and quality; seek out organizational support to implement EWP and have leadership skills, knowledge and authority to improve their programs.

Scene #16

Jon Yonko

Line Management Ownership is central to the Enhanced Work Planning (EWP) successes at Mound. By this, I mean Line Management-- all the way from first level supervisors of the line organization, on up through their chains of command to EG&G senior management--assumes ownership of planning, implementation and the results of an activity. We are so committed to this tenet, that EWP has been included in our Cost Plus Award Fee as a special emphasis area and into the Ohio Field Office's Long Term Strategic Plan. Line management ownership has been critical to achieving major improvements in our scheduling capabilities. The cooperation from several functional groups on the EWP Team in developing a new scheduling process has resulted in a 112% increase in jobs "worked to schedule" as compared to data from last year. Line management's ownership and promotion of the new work control system and the EWP elements have contributed to the outstanding success of Mound's safety record, which is currently 3 million staff-hours without a lost-time injury.

But, EWP is not easy. It requires persistence and consolidated management commitment. Sometimes there is an initial slowdown of productivity, due to the intense planning effort required, however the reward comes during the implementation phase of the job...that's where the rubber meets the road. Our results speak for themselves about the overall improvement in safety and productivity through EWP.

Scene #17

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Voice over of narrator- animate "Enhanced approach to planning graphic"

Voice over of Narrator

Matte box puzzle. Shot of Line Management Ownership piece develops into live scene of Jon Yonko dressed in suit and tie, office-type background.

CG to introduce Jon: "Jon Yonko, Manager, Mound"

Shot of Jon entering a room full of managers to start conducting a formal management briefing at Mound

Jon talks to the camera

Show PI chart that illustrates the 112% increase

Shot of 3 million staff-hour PI

Script Text

Video Scenes/Notes

Narrator

An important part of line management ownership is the use of Performance Indicators to measure the success of their EWP process. Performance Indicators are tools used to both meet goals and improve processes. EWP facilitates the establishment of meaningful performance indicators because they directly relate to work management. Input is gathered from those who do the work to decide what should be measured, so that they may better control, understand and improve the work they do.

Voice over of narrator

Scene #18

Narrator

The ownership of EWP by Line Management is the basis for forming Organizationally Diverse Planning Teams. The line manager brings together team members who play an active role in the work planning process. These work management teams consist of planners, engineers, workers, training and safety and health professionals who become an integrated, multi-disciplinary team. Each member comes to the table with something to contribute. Especially workers, who ensure timely input and provide the benefit of their "hands-on" experience.

Voice over of narrator.

Scene #19

Jim Trujillo

At Fernald the Enhanced Work Planning Core Teams, as well as the actual work planning teams consist of representatives from virtually all organizations that are involved in requesting, planning, approving, or executing work. The selection of these team members is based on their site-specific experiences in the workplace and their involvement in the work management program. The teams here are made up of representatives from organizations such as Quality Assurance, Health and Safety, Rad Control, Engineering, Line management, Training, Medical, and most importantly, the Craft or the Worker. As a result of this organizationally diverse mix of team members, all requirements to accomplish the work are identified and evaluated up front and then built into a work flow, that ultimately carries over into the actual work package. This process has eliminated surprises to the workforce by fostering the identification of any tools, equipment, training and medical qualifications, and work permit or procedure requirements in advance of the actual work. It has also provided a vehicle to review work packages in parallel in lieu of the traditional sequential method, while identifying any known workplace hazards thus allowing us to create a safer work environment for the workforce while improving the productivity of the employees.

Shot of the moving matte box. Then the piece on Organizationally Diverse teams opens into a live scene of a core team at Fernald. Camera zooms to Jim Trujillo who is the team leader

CG to introduce Jim: "Jim Trujillo, EWP Program Manager, Fernald

Show work control process flow diagrams (to be provided by Fernald).

Script Text

Video Scenes/Notes

Through the use of Organizationally Diverse Teams, we have reduced our planning time for work packages by 60% through parallel review and actually reduced the size of our work packages significantly by identifying and eliminating unnecessary paper requirements, thus creating a more understandable work package for the workforce. Similar benefits have been realized at Rocky Flats, Oak Ridge and Pantex through the use of organizationally diverse work teams.

Back to shot of Jim T

Scene #20

Narrator

One function of Organizationally Diverse Planning Teams is to determine the level of rigor applied to the work planning process. EWP uses a Graded Approach to work management, based on risk and complexity for work planning. It helps sites develop criteria for determining which tasks can be performed better, faster, safer, and cheaper by relying on the skill of the craft. For example, tasks such as routine maintenance may benefit from team planning to facilitate coordination of resources but do not require the same degree of scrutiny as complex, nonroutine tasks.

Voice over of narrator.

Scene #21

Mike Duffy

Varying levels of hazards dictate that not every work task requires the same degree of rigor in planning and execution. Using EWP principles, work is divided into categories based on risk and complexity. Under this graded approach, the planning for work packages is commensurate with the hazards and requirements of the job. Work is planned with a "balanced combination" of hazard evaluation, written guidance, craft skills, and worksite supervision.

Show graphic of the moving matte box. Then camera moves to shot of Mike Duffy outside at INEEL

Shot of Mike Duffy

Scene #22

Worker

As field workers, we now rely heavily on our craft skills to perform our work. Participating in the planning team provides us the opportunity to contribute information based on our experience, skill and practical knowledge, which assists in clarification of work packages. As a result, required work packages consist of only the necessary written guidance essential to safe and efficient job completion. We take pride in our work, accept responsibility for, and have gained ownership of our work by participating in the planning process.

CG to introduce Terry: "Terry Perez, First Class Pipefitter, INEEL"

Here at the Chem Plant, I have personally worked on this generator using a work package with excessive, non-value guidance to perform a simple repair in a nonhazardous building. This written guidance contained unnecessary instructions and procedures that addressed information I was taught as a journeyman. Now, I'm participating, using my skills, to assist in developing work packages that are usually much shorter and contain only the required written guidance for safe job completion. I've been working at the ChemPlant for 15 years and I now feel like I am a valuable contributor to the work management process.

Scene #23

Mike Duffy

Routine activities may not require detailed planning and hazard review every time the work is performed. At INEEL, a multi disciplinary work team developed a tool to assist in hazard identification. This tool, the Job Requirements Checklist, the JRC, assists the work order owner in determining which activities fall into which category using a graded approach, again based on the risk and complexity of the work. This allows the work order owner to apply the appropriate review rigor, thus saving time and dollars.

CG to introduce Mike: "Mike Duffy, EWP Team Leader, INEEL"

Scene #24

Planner

At the Chem Plant, because of our graded approach, many of the current work packages no longer require the large number of approval signatures that had been required in the past. This reduction in signatures for planning these jobs has reduced work order cycle times thus reducing costs. I would like to emphasize, however, that planning of those work packages concerning highly complex and high-risk work is not compromised. Rigorous team planning and review is done with the same approval signatures as required in the past.

CG to introduce Rusty: "Rusty Grant, Planner, INEEL"

Shot of planner at in an office setting at the computer.

Scene #25

Narrator

Sites across the complex are using the graded approach and it has significantly decreased the number of work packages that require rigorous planning. Reliance on the knowledge, skills and abilities of craft workers, or "skill of the craft," is an important part of the graded approach. This results in cost savings and fewer work stoppages. For example, Los Alamos has implemented skill of the craft into its facility work control processes' laboratory-wide, earning craft acceptance along with increased efficiency.

Voice over of narrator

Scene #26

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Script Text

Video Scenes/Notes

Narrator

Although the first three elements of EWP are important, the single, most critical factor is Workforce Involvement, beginning at the earliest phase of work planning. The quality of work performed often parallels the degree of ownership experienced by workers. And workers' morale improves when their opinions and expertise are demonstrably valued.

Scene #27

Hanford crafts representative #1

At B Plant/WESF, we are expected to bring our experience and facility specific knowledge into our team's planning activities before work begins. By putting the experience to use, we can do any job better through EWP. For example, getting RadCon involved in the up-front planning has helped us prepare the right RWP for the job, including contingency planning, minimizing the misuse of RWPs. It is the very diversity of our work groups that is our greatest strength.

At B Plant/WESF, we are pursuing an aggressive schedule to prepare our canyon facility for deactivation, while preparing WESF for long-term operations. Enhanced Work Planning, especially worker involvement in the identification of hazards, plays a big part in our success at both facilities. We have experienced and highly skilled craftsmen which help us to plan the right kinds of jobs, increasing our overall productivity. Our teams are aware of the need to involve ALL workers in planning and take responsibility for performance and safety. Management has communicated that work package cycle time has dropped from 76 days to 37 days.

Scene #28

Hanford crafts representative #2

Like everyone in DOE, we have the authority to stop work in the event of an unsafe condition. However, by participating in the decision making process throughout both the planning and execution phases of work, we can help to eliminate unsafe conditions in our work.

Scene #29

Narrator

At the Savannah River site, workers received very tangible benefits from their involvement in the enhanced work planning project to roll back radiologically contaminated areas at the H-Canyons. Not only were the site workers part of significant safety and efficiency improvements, but their jobs became easier and more enjoyable to perform.

Scene #30

Voice over of narrator

Shot of Worker Involvement piece of the moving matte box develops into live scene

CG to introduce : "Keith Kever, Pipefitter/Team Coordinator, B Plant/WESF, Hanford "

CG to introduce : "Stuart Hubbard, BHI D&D Worker/ HAMMER Instructor, Hanford"

Voice over of Narrator

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Script Text

Video Scenes/Notes

Paul King
words are recorded on Savannah River Video (see production notes)

Scene #31

Narrator
The workforce at the Purex facility was on an aggressive schedule to decommission and deactivate the nuclear reactor fuel reprocessing plant. Worker involvement in the work planning process cut four months and \$10 million from the deactivation project.

CG to introduce: Paul King, Safety and Health Inspector, Savannah River"
Use shot from Savannah River video: *H-Canyon Rollback an EWP Success Story*. Number 170 - 187

Scene #32

Marion Shuck
words on the original EWP tape

Voice over of narrator

Scene #33

Narrator
Successes, like the ones achieved at various DOE sites, have been exported throughout the DOE complex through Organized, Institutionalized Communication. Sites that are initiating pilot projects benefit from the programs and lessons learned at sites with existing successful EWP programs. Sites ready to extend their pilot project to additional areas onsite, can share strategies and approaches with other sites in similar circumstances. With organized communication, EWP sites freely share programs, procedures, software tools, and training courses to reduce duplicative efforts and maximize resource use.

CG to introduce: Marion Shuck, Nuclear Control Technician, Hanford"
Use shot from *Enhanced Work Planning* video

Voice over of narrator

Scene #34

Linda Yost
One of the most significant successes of EWP is the creation of a communication network between DOE sites, field offices, and headquarters to share real-time lessons learned, tools, successes, and even failures. This critical sharing has been accomplished through formal, institutionalized channels as well as the informal communication of facility manager to facility manager from site to site and across the complex. This communication and networking ensures that each site experiences the full benefits of EWP applied to all work performed within DOE. The formal methods of communication and networking are only "jumping off" points for the intrasite networking that has characterized EWP from the outset. One of the major benefits of EWP has been that our operating contractors regularly share successes and failures with each other. Products and processes developed with DOE dollars are transferred easily and quickly from site

Moving matte box with Organized Communication develops into live scene.

Shot of Linda Yost in office setting

Script Text

Video Scenes/Notes

to site; through one-on-one conversations as well as more formal methods. This network of contractors, DOE staff and senior management from Headquarters and the field offices is *committed to positively impacting the way DOE conducts work across the nation.*

Scene #35

Michael Hillman

EWP was an outgrowth of grass roots EH and Field initiatives to improve Conduct of Operations, Work Control, and Safety and Health programs in the field. While EH gave EWP its form, the Field gave it substance. As EWP evolved beyond the pilot stage, a steering committee was formed to insure that EWP stay firmly anchored to its goal of improving work management programs in the field. Staffed by DOE and Contractor personnel, the steering committee provides technical support to promote the application of EWP principles to all work performed complex-wide. The goal of the committee is to improve the networking and communication of EWP lessons learned among DOE sites, with the ultimate objective of developing a standard approach to work management across the DOE complex.

Animate graphic of U.S. map with DOE sites indicated, arrows moving from site to site

CG to introduce Mike: "Michael Hillman, Director, Office of Field Support, Office of Environmental, Safety and Health, DOE-HQ"

Shot of Michael Hillman (at Hanford)

Scene #36

Linda Yost

In addition to the EWP Steering Committee, some of the formal methods set up to foster this networking are:

1. The EWP homepage
2. A standardized training curriculum
3. A "cross-pollination document," which summarizes EWP products, tools and procedures
4. A quarterly report from Headquarters, reporting progress, successes, and new developments from each of the sites involved in EWP.
5. Periodic and regularly scheduled teleconferencing meetings are held to provide a forum for topics of general interest.
6. The EWP Steering Committee sponsors periodic EWP counterpart meetings and workshops for more intensive interaction among EWP site representatives.

CG to introduce Linda: "Linda Yost, EH Specialist, Office of Field Support, DOE-HQ"

Overhead/call out graphics
EWP Networking Resources

1. Homepage
2. Standardized Training
3. Cross-pollination document
4. Quarterly report
5. Teleconferencing
6. Workshops and meetings

The level of ongoing communication and networking is one of EWP's shining successes.

Scene #37

Narrator

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Script Text

Video Scenes/Notes

These successes in streamlining work planning processes are all available to you, for use in your own work planning activities. The Cross-pollination document identifies more than 40 tools that your DOE counterparts have developed to streamline work planning. It identifies the source of each tool and the name of someone who can share it with you. There are tools for developing performance indicators, identifying medical monitoring requirements, developing Integrated Scheduling systems, and much more.

End by going back to shot of Linda

Voice over of Narrator

Scene #38

Joe Fitzgerald

Over the last few years the Department has made great strides in operating more efficiently. But I believe we can do even better. I am committed to our working more safely, productively and efficiently for the American people, and completing remedial actions at many sites over the next decade.

I urge you to capitalize on this network of support and sharing of lessons learned. You are an agent of change and I hope you will leave this training session with the knowledge and motivation to implement immediate enhancements to your work planning process. You can make a very real and lasting contribution to the safety and productivity of our DOE workforce.

Back to shot of Joe Fitzgerald at his desk.

I ask you to join me in using EWP to make the Department a leader in workforce safety as well as management efficiency and excellence.

Epilogue

EWP is a recipient of the National Performance Review Hammer Award, August 1997.

Credits

Produced for the Department of Energy, in cooperation with the EWP Steering Committee, Fernald, Hanford, INEEL, Mound, Oak Ridge, Savannah River

Logos for EWP/DOE, Tulane/HAMMER Project, Tulane School of Public Health and Tropical Medicine, Intermountain Film and Video Production.